

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Status of Claims:

No claims are currently being cancelled.

Claim 1 is currently being amended.

Claims 14-17 are currently being added.

This amendment and reply amends and adds claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claims remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending and adding the claims as set forth above, claims 1, 7 and 12-17 are now pending in this application.

Claim Rejections – Prior Art:

In the Office Action, claims 1 and 7 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,006,785 to Iverson; claims 1 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,318,980 to Kurihara in view of Iverson; and claim 13 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Iverson in view of U.S. Patent No. 5,487,825 to Kurze et al.. These rejections are traversed with respect to the presently pending claims under rejection, for at least the reasons given below.

In the Response to Arguments section on pages 6 and 7 of the Office Action, it asserts that:

Given the broadest reasonable interpretation a valve seat can be interpreted to be a surface or structure that a valve element such as ball, a leaf spring or an end of a plunger, comes to rest upon during some point in operation/actuation of a valve. The term is not restricted exclusively to a structure that provides a stop for a valve member in a closed state or exclusively to a structure that provides such a resting structure when a valve is in an open state. It thus noted by the examiner that the limitations as claimed are sufficiently broad to encompass the interpretation of the bearing surface of element 5 and 6 as forming a valve seat which a valve member 17 rests upon when the valve member 17 is in a open position as shown in figure 7. The

bottom surface of the valve element 17 opposes elements 5 and 6 and is separated from those surfaces by the seating plate (coating layer) designated as element 10.

In response to the above assertions made in the Office Action, please note that claim 1 recites that “the opposing part . . . faces the suction hole and a valve seat at the opening edge of the suction hole.” Thus, the claimed valve seat is provided at the opening edge of the suction hole. Therefore, the valve seat and the suction hole are located in the same side with respect to the valve.

Since Iversen’s valve structure does not have the above-mentioned features, and since none of the other cited art of record rectifies these deficiencies of Iversen, independent claim 1 is patentable over the cited art of record.

Additionally, please note that the claimed coating layer forms “a predetermined clearance between the opposing part and the valve seat.” See, for the example, the description on page 9, second paragraph of the specification, which states that:

Further, in the first embodiment, as the clearance 27 is formed by providing the coating layer 29, it is not troublesome to manufacture the valve plate 12, requiring no mechanical processing. Therefore, the clearances 27 can be formed easily, and the manufacturing cost can be decreased.

As explained in the previously filed reply, Iversen’s “sealing plate 10” corresponds closest to the “sheet member 60” in the present application (see Figure 6 of the drawings [3rd embodiment]). The “sealing plate 10” of Iversen is not a coating layer.

Therefore, for this additional reason, independent claim 1 patentably distinguishes over Iversen and the other cited art of record.

New Claims:

New claims 14-17 have been added to recite additional features of the present invention, and to address the comments made in the “Response to Arguments” section concerning the breadth of the claims and how certain claim features are to be understood. For example, new claim 14 recites that the valve seat is provided at an opening edge of the suction hole, and new claim 15 recites that the valve seat is provided around the suction hole, whereby the features recited in these claims are not taught or suggested by Iversen. New claim 16 recites that the coating layer is disposed between the opposing part and the valve seat to thereby form the predetermined clearance therebetween. Iversen’s sheet member 60 does not meet these specific claim limitations. Lastly, new claim 17 recites that the

valve seat provides for a resting position for the valve in a closed state of the valve, in order to address the broad interpretation of "valve seat" as discussed on pages 6 and 7 of the Office Action.

Conclusion:

Since all of the issues raised in the Office Action have been addressed in this Amendment and Reply, Applicants believe that the present application is now in condition for allowance, and an early indication of allowance is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petitions for such extension under 37 C.F.R. §1.136 and authorize payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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